

## REMARKS

This amendment is responsive to the final Office Action mailed April 2, 2009 (hereafter "Office Action"). Applicant requests reconsideration of the claims and allowance of the application in view of the foregoing amendments and the following remarks.

### Status of the Claims

Of the claims pending in the present application, Claims 1, 40-46, and 109-124 are currently being examined while Claims 2-39 and 47-99 stand withdrawn. Claims 1, 109, 110, 113, 114, 117, 118, 121, and 122 have been amended herewith. New Claim 125 has been added.

### Interview Summary

Applicant thanks Examiner Bartley for the time and courtesy he extended in a telephone interview conducted with the undersigned counsel on September 9, 2009. The interview focused primarily on Claim 1 in view of the disclosures of Korhammer and Gianakouros, discussed further below. Particular attention was given to the support in the specification for amended Claim 1. While agreement was not reached regarding the patentability of the claims, it was agreed that applicant would consider further amendments to the claims and provide explanation of the manner in which the claims are supported by the specification. It was expressed to the undersigned counsel that such amendments to the claims would require additional searching and/or consideration. Accordingly, applicants are submitting the present amendment with a request for continued examination.

### Examiner Request

On page 12 of the Office Action, the Examiner requested applicant to indicate in the specification where support is given for amendments to the claims. In the present amendment, applicant has clarified Claim 1 by stating that the method is performed "using a computer system," e.g., as described in paragraph [0042] of the application as published (US 2001/0044770). Applicant has further clarified Claim 1 by stating that the market processes are "configured to pair orders received from buying and selling trading processes for trading

items specified in the orders," e.g., as described in paragraphs [0056] and [0143], among other places.

Claim 1 has also been amended to recite "executing, on the computer system, a representation process that is configured to communicate with the at least two market processes and provide a communication conduit between the at least two market processes for synchronizing processing of an order that is simultaneously available for execution by the at least two market processes." The application describes mirror ELF (mE) programs that couple order umpires (or market processes) for synchronizing actions taken by the order umpires. *See, e.g.*, FIGURE 1 (mEs 50, 51, 52, 53); paragraphs [0677] to [0688]; paragraphs [0191] to [0194]; and paragraphs [0089] to [0095] of the application as published. Paragraph [0089], lines 3-4, explain that a mirror ELF is also referred to in the application as a "representation process."

Further, Claim 1 has been amended to recite "wherein a pairing of orders by one of the at least two market processes causes the one market process to send an instruction related to an order in the pairing to the representation process which responds thereto by sending a corresponding instruction related to the order to the other of the at least two market processes to prevent the order from simultaneously being paired by the other of the at least two market processes." For support, attention is directed at least to the portions of the specification, cited above. Paragraphs [0677] to [0688] discuss a use case in which a mirror ELF is used to synchronize two markets, while paragraphs [0191] to [0194] describe a service of the system 5 for synchronization of orders in multiple markets. Paragraphs [0089] to [0095] provide an overview of embodiments of a mirror ELF. As noted at paragraph [0143], a pairing may be an execution, and as noted at paragraph [0092], for example, when a mirror ELF (mE) receives an "execute" action or instruction from one order umpire (market process), it converts the action to a "cancel for execution" instruction that is sent, according to paragraph [0093], to the other order umpire (market process).

Claims 109 and 117 have been amended similar to Claim 1. For at least reasons similar to those discussed above relative to Claim 1, applicant respectfully submits that the amended elements of Claims 109 and 117 are supported by the specification as filed.

Claims 1, 40-46, and 109-124 Meet the Requirements of Section 112, First Paragraph

The Office Action rejected Claims 1, 40-46, and 109-124 as allegedly failing to comply with the enablement requirement of Section 112, first paragraph. In one respect, the Office Action alleged that the specification as filed fails to enable one skilled in the art to execute buy and sell orders. Applicant respectfully disagrees.

As explained in the application, for example at paragraph [0096], "[a]n order umpire (oU) program serves as a facility that implements the rules of engagement between two or more ELFs [electronic liquidity finders, also referred to in paragraph [0046] as trading processes] for exchanging information or merchandise." In paragraph [0143], oUs are described as "pairing" orders resulting in an execution of the orders. The orders are for buying and selling items, e.g., as described in paragraphs [0056], [0134], among other places.

The Office Action queried how securities laws and SEC requirements would be complied with by the system claimed in the present application. While compliance with securities laws and SEC requirements is necessary for some market constructions, it is not necessary for all market constructions according to the present application. *See, e.g.,* paragraph [0188]. Furthermore, since such security laws and SEC requirements are well known to persons having ordinary skill in the art, it is not necessary that the specification contain detailed descriptions of the workings of such laws and requirements and how compliance is achieved. It is sufficient, for example, for the specification to describe processing of pairing reports, e.g., at FIGURE 39, paragraphs [0453] et seq., and paragraphs [0569] to [0571].

The enablement requirement of Section 112, first paragraph, requires only that the disclosure contain sufficient information to enable one skilled in the pertinent art to make and use the claimed invention without undue experimentation. *See* MPEP 2164.01. A patent need

not teach, and preferably omits, what is well known in the art. *In re Buchner*, 929 F.2d 660, 661, 18 USPQ2d 1331, 1332 (Fed. Cir. 1991). The fact that experimentation may be complex does not necessarily make it undue. *In re Certain Limited-Charge Cell Culture Microcarriers*, 221 USPQ 1165, 1174 (Int'l Trade Comm'n 1983), *aff'd sub nom., Massachusetts Institute of Technology v. A.B. Fortia*, 774 F.2d 1104, 227 USPQ 248 (Fed. Cir. 1985). The test of enablement is not whether any experimentation is necessary, but whether, if experimentation is necessary, it is undue. *In re Angstadt*, 537 F.2d 498, 504, 190 USPQ 214, 219 (CCPA 1976).

Applicant has carefully considered the claimed invention and the specification in view of the factors set out in *In re Wands*, 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988). Applicant respectfully submits that the specification, when taken as a whole in context with information that is known to persons of ordinary skill in the art, sufficiently describes the claimed invention and enables a person skilled in the art to make and use the claimed invention without undue experimentation.

Withdrawal of the claim rejections under the enablement requirement of 35 U.S.C. § 112, first paragraph, is respectfully requested.

The Office Action also rejected Claims 1, 40-46, and 109-124 for allegedly failing to comply with the written description requirement of Section 112, first paragraph. The Office Action alleged that the specification does not describe the claimed invention operating on "a computer." In response, the Examiner's attention is drawn, for example, to paragraph [0042] of the application as published. Furthermore, the claims have been amended to recite "computer system," thus overcoming the concern raised in the Office Action.

The specification also explains that the claimed market processes and trading processes are embodied as software processes executing on the computer system. See, e.g., paragraphs [0043], [0047], [0096] *et seq.*

In view of the claim amendments and the foregoing discussion, applicant submits that the disclosure in the present application sufficiently demonstrates that applicant had possession of

the invention as claimed. Withdrawal of the claim rejections under the written description requirement of 35 U.S.C. § 112, first paragraph, is respectfully requested.

Patentability of Claims 1, 40-46, and 109-124 Over Korhammer and Gianakouros

In the Office Action, Claims 1, 40-46, and 109-124 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Korhammer et al. (U.S. 6,278,982) (hereafter "Korhammer") in view of Gianakouros et al. (U.S. 7,035,819) (hereafter "Gianakouros").

While applicant maintains that Claims 1, 109, and 117 as previously presented were in patentable condition, applicant desires to advance the prosecution of the present application and has amended Claims 1, 109, and 117 to clarify and supplement certain aspects of the claims. Applicant respectfully submits that the cited art (Korhammer and Gianakouros), considered alone or combined, fails to teach or suggest the method claimed in Claim 1.

According to Korhammer, a securities trading system receives trading data from various electronic communication networks (ECNs) and electronic exchanges and aggregates the data for display to a customer or trader at a terminal. See, e.g., Figure 3 of Korhammer. A single terminal may be used to view, analyze, and conduct securities transactions with two or more ECNs, alone or in combination with one or more electronic exchanges. See, e.g., the Abstract of Korhammer. A consolidating computer system ("CCS") aggregates order book information from each participating ECN order book computer and electronic exchange. The combined information is displayed to the customer. See, e.g., Figure 2 of Korhammer.

As a first point, applicant submits that Korhammer fails to teach or suggest "executing, during an overlapping time interval on a computer system, at least two market processes having respective market methodologies, wherein the at least two market processes are computer software processes executing on the same computer system, and wherein each of the market processes provides a distinct and separate market and is configured to pair orders received from buying and selling trading processes for trading items specified in the orders," as recited in Claim 1.

The Office Action (pages 4 and 5, in particular) refers to the CCS taught by Korhammer. However, applicant respectfully submits that the CCS does not provide a computer system on which "at least two market processes" are executing, "during an overlapping time interval," each providing "a distinct and separate market and...configured to pair orders" as claimed.

Korhammer teaches multiple different systems (ECNs and electronic exchanges) but each system is separately executing on different computer systems using different protocols. Korhammer merely teaches a "consolidation system" (Col. 4, lines 13-14) that communicates with each of the different ECNs and exchanges according to their native protocols and consolidates the market information into a single display for a user.

Stated otherwise, Korhammer's CCS only aggregates order book information that is received from different external ECNs and electronic exchanges. The CCS neither manages the order books of the ECNs and electronic exchanges nor executes orders. Rather, the CCS is merely an intermediary for traders to receive data from the ECNs and electronic exchanges and to submit trader's orders to the ECNs and electronic exchanges.

As another point, applicant submits that Korhammer fails to teach or suggest "executing, on the computer system, a representation process that is configured to communicate with the at least two market processes and provide a communication conduit between the at least two market processes for synchronizing processing of an order that is simultaneously available for execution by the at least two market processes," as claimed in Claim 1. Applicant has carefully considered Korhammer and finds no disclosure that is relevant to a "representation process" as claimed.

The "representation process" as claimed in Claim 1 is useful, as "a pairing of orders by one of the at least two market processes causes the one market process to send an instruction related to an order in the pairing to the representation process." The representation process "responds thereto by sending a corresponding instruction related to the order to the other of the at least two market processes to prevent the order from simultaneously being paired by the other of

the at least two market processes." Again, these features are neither taught nor suggested by Korhammer.

In view of the deficiencies of disclosure in Korhammer, applicant has also considered the disclosure of Gianakouros. The Office Action (page 17) cited Gianakouros for allegedly teaching order execution. However, Gianakouros does not teach or suggest "executing, on the computer system, a representation process" as claimed in Claim 1, wherein the representation process "is configured to communicate with the at least two market processes and provide a communication conduit between the at least two market processes for synchronizing processing of an order that is simultaneously available for execution by the at least two market processes." Gianakouros also fails to teach or suggest "wherein a pairing of orders by one of the at least two market processes causes the one market process to send an instruction related to an order in the pairing to the representation process which responds thereto by sending a corresponding instruction related to the order to the other of the at least two market processes to prevent the order from simultaneously being paired by the other of the at least two market processes."

Applicant respectfully submits that neither Korhammer nor Gianakouros teach or suggest the elements recited in amended Claim 1 and therefore do not support a *prima facie* case of obviousness. For at least the above reasons, Claim 1 should be allowed.

Additionally, Claims 40-46 should be allowed, both for their dependence on Claim 1 and for the additional subject matter they recite.

For example, with respect to Claim 45, the Office Action recites Korhammer at Col. 10, lines 6-8, where a customer specifies the number of shares it wishes to purchase and the price of the purchase. However, it is not clear how such disclosure applies to Claim 45, which recites the operational mode of a market process as "an in process mode in which the market process has priority over other market processes for executing a trade."

Claims 109 and 117 have been amended similar to Claim 1. For reasons similar to those discussed above with respect to Claims 1 and 40-46, Claims 109-116 should be allowed. Neither

Korhammer nor Gianakouros teaches or suggests a system for facilitating trading, comprising a processing component that is configured to execute "at least two market processes, a buying trading process, and a selling trading process," as claimed in Claim 109, as well as "a representation process" as claimed, particularly "wherein a pairing of orders by one of the at least two market processes causes the one market process to send an instruction related to an order in the pairing to the representation process which responds thereto by sending a corresponding instruction related to the order to the other of the at least two market processes to prevent the order from simultaneously being paired by the other of the at least two market processes."

Further, for reasons similar to those discussed above with respect to Claims 1 and 40-46, Claims 117-124 should also be allowed. Neither Korhammer nor Gianakouros teaches or suggests a "tangible computer-accessible medium having executable instructions stored thereon" that cause a computer to "execute...at least two market processes" as claimed in Claim 117, as well as "a representation process...wherein a pairing of orders by one of the at least two market processes causes the one market process to send an instruction related to an order in the pairing to the representation process which responds thereto by sending a corresponding instruction related to the order to the other of the at least two market processes to prevent the order from simultaneously being paired by the other of the at least two market processes."

#### Rejoinder of Withdrawn Claims

Lastly, in view of the patentability of Claims 1, 40-46, and 109-124, applicant requests rejoinder and allowance of withdrawn Claims 2-39 and 47-99, which are dependent either directly or indirectly on allowable Claim 1.

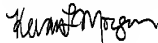


CONCLUSION

For at least the reasons discussed above, applicant requests withdrawal of the claim rejections, rejoinder of the withdrawn claims, and issuance of a notice of allowance.

Respectfully submitted,

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